

US ENVIRONMENTAL PROTECTION AGENCY  
ENVIRONMENTAL MONITORING SYSTEMS LABORATORY-CINCINNATI

TERMS USED FOR WATER POLLUTION (WP) LABORATORY PERFORMANCE EVALUATION STUDIES

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TRUE VALUES: A THEORETICALLY CALCULATED VALUE BASED UPON CAREFUL WEIGHT AND VOLUME MEASUREMENT OF CONSTITUENTS. PLEASE NOTE THAT, FOR SOME ANALYTES, THIS VALUE IS QUITE DIFFERENT FROM THE RESULT THAT CAN BE EXPECTED WHEN THE STUDY SAMPLE IS ANALYZED. WHEN UNAVOIDABLE, THIS MAY BE A REFERENCE VALUE THAT REPRESENTS ACHIEVABLE RESULTS.

ACCEPTANCE LIMITS: A 99% PREDICTION INTERVAL CALCULATED FROM AVAILABLE PERFORMANCE EVALUATION DATA OF EPA AND STATE LABORATORIES.

BY DEFINITION THE ANALYTIC RESULTS FROM A LABORATORY PRODUCING VALID DATA SHOULD FALL WITHIN ACCEPTANCE LIMITS 99 TIMES OUT OF 100.

WARNING LIMITS: A 95% PREDICTION INTERVAL PRODUCED IN THE SAME WAY AS THE ACCEPTANCE LIMITS.

DATA FALLING OUTSIDE THESE LIMITS BUT INSIDE THE ACCEPTANCE LIMITS SHOULD BE REVIEWED FOR POSSIBLE PROBLEMS, BUT SUCH DATA SHOULD NOT NECESSARILY BE CONSIDERED UNACCEPTABLE.

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MEANING OF THE PERFORMANCE EVALUATION COMMENTS:

ACCEPT.: THE REPORTED VALUE WAS WITHIN ALL LIMITS.

CK. FOR ERR.: THE REPORTED VALUE WAS WITHIN THE ACCEPTANCE LIMITS, I.E., TECHNICALLY ACCEPTABLE, BUT SINCE THE VALUE WAS OUTSIDE OF THE WARNING LIMITS A MARGINAL PROBLEM MAY EXIST.

NOT ACCEPT.: THE REPORTED VALUE WAS BEYOND THE  
ACCEPTANCE LIMITS.

UNUSABLE: THE VALUE WAS REPORTED AS A "LESS THAN" OR  
"GREATER THAN" VALUE AND COULD NOT BE  
QUANTITATIVELY JUDGED.

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ANY PERFORMANCE EVALUATION OTHER THAN ACCEPTABLE REQUIRES A REVIEW  
BY THE LABORATORY TO IDENTIFY POSSIBLE DEFICIENCIES OR ERRORS THAT  
NEED CORRECTING.